

Toward a New Theory of Metaphorical Interpretation

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Over the years, the principles of metaphorical interpretation have been proposed to be semantic, pragmatic, or/and cognitive. However, these proposed theories have never reached even a near consensus. In this context, recently, Leezenberg (2001) proposed an interesting theory based on the notions of “context” and “thematic dimension,” which is basically semantic but also tries to combine cognitive aspects of language. Given this, one purpose of this paper is to review Leezenberg’s theory. In the process of pointing out some problems of his theory, we will propose an alternative analysis on the principles of metaphorical interpretation which combines semantic and cognitive aspects of language.

Key words: metaphor, conventional (conventionalized) metaphor, novel metaphor, metaphorical interpretation, literal interpretation, thematic dimension, semantic clash, cognitive accessibility, conceptualization

1. Introduction

The study of metaphor has more than 2,300 years of history if we regard Aristotle’s statements on metaphor as the beginning of studies in this area. Including Aristotle, the traditionalists’ view on metaphor was such that it is a figure of speech used for special effects, and that you must have a special talent to be able to use it and use it well. However, metaphor is found in our everyday language as well as in literary work, as Lakoff et al. (Lakoff & Johnson, 1980; Lakoff, 1987; Lakoff & Turner, 1989; Lakoff, 1990; Lakoff, 1993; Lakoff, 1999) have also observed.

The cognitive semanticists represented by Lakoff put forth a new view of metaphor. This theory, which treats metaphor as a primary research thesis, proposed that metaphor is a property of concepts, not of words,

and it is central to our everyday language. It was further proposed that the language users categorize the world and break it into concepts mainly through metaphors. Although this theory has had a big influence on metaphor research and produced numerous followers, it is being as severely criticized by the truth-conditional semanticists as the cognitivists criticize the truth-conditional semantics. On the one hand, the main criticism by the cognitivists is that truth or understanding cannot be framed in an absolute and neutral conceptual system, but it should be relative to our cultural conceptual systems. They argue that there is no such thing as the objective reality, which is a myth. On the other hand, the main criticism by the truth-conditionalists is that the cognitivists do not provide a way to go from our internal representations to the outside world. Furthermore, the cognitive theory of metaphor as cross-conceptual domain mappings is not vigorous enough.

Given this never-compromising situation, in which a theoretical consensus seems to be far away, what could reasonably be concluded is that a theory that combines the concept of objective reality by the truth-conditional view and the concept of mental representations by the cognitive view is called for. In this respect, Leezenberg's (2001) semantic theory comes up as a promising approach, which tries to combine cognitive aspects of language, based on the notions of "context" and "thematic dimensions."

In this context, one of the two purposes of this paper is to review Leezenberg's theory and discuss its problems. The other purpose is to propose an alternative analysis as an attempt to complement the problems of Leezenberg's theory, which will also combine semantic and cognitive aspects of language.

This paper will be organized as follows: In section 2 Leezenberg's theory will be reviewed, and in section 3 some problems of his theory will be discussed. In section 4 an alternative theory will be presented.

2. Leezenberg's Metaphor Theory

2.1. Thematic Dimension

Leezenberg (2001) argues that the metaphorical interpretation is the propositional content *semantically* determined *in context*. According to him,

there is no difference such as non-literal vs. literal meaning between a metaphorical interpretation (hereafter, MI) and a literal interpretation (hereafter, LI). Both of them are semantically determined meanings, and the context determines which interpretation is obtained. He argues that “there simply are no properties or criteria that strictly distinguish metaphorical and literal language. *Metaphor is not a syntactic construction or a semantic object of a specific nature; it is a mode of interpretation*” (Leezenberg, 2001, p. 186).

Then, given a sentence for which both a so-called LI and a so-called MI are available, what contextual factors determine which of the two interpretations is selected? Take a look at the following example from Leezenberg (2001, p. 8):

(1) Anchorage is a cold city.

In (1), according to Leezenberg, if *cold* is interpreted as a “climate or temperature” property, it receives the LI, while if it is interpreted as a “hospitality or attractiveness” property, it receives the MI. He proposes that this property, namely, “thematic dimension,” determines which of the two interpretations is selected.

The notion of “thematic dimension” is originated from Bartsch (1987). She observes that “dimensionally weakly determined” property expressions like *good*, *satisfactory*, and *strong* do not in themselves express any specific property, but require a specification of which respect of qualification they apply in. That is, thematic dimension specifies the theme of a discourse, or what that discourse is about, as the following example shows:

(2) John’s paper is *stylistically* good.

In (2), the adverb plays a role of explicitly indicating the thematic dimension of the utterance. What (2) asserts is that John’s paper is good in terms of its style, but it does not assert anything about, say, the academic quality of its contents.

As in utterances like (2), thematic dimensions can be expressed explicitly. However, they need not be fully specified as in the following:

(3) John is doing well.

Depending on the context, (3) could mean that John is doing well in all relevant respects. Or it could be interpreted with respect to a specific thematic dimension such as health, career, finance, family, etc.

Leezenberg suggests that thematic dimensions involve presupposed rather than asserted information. Consider the following two pairs of examples:

- (4) a. John is doing well *financially*.
 b. John is not doing well *financially*.
- (5) a. John is talking *fast*.
 b. John is not talking *fast*.

First, the predicate-limiting adverbial in (4) is not affected by negation while the manner adverbial in (5) is affected by negation. Consequently, the following inferential patterns can be observed:¹⁾

- (6) a. John is doing well *financially* \models John is doing well
 b. John is talking *fast* \models John is talking

In other words, predicate-limiting adverbials express presupposed content, but manner adverbials express part of the asserted content.

It is assumed that there are three kinds of thematic dimensions: internal, external, and contextual dimensions. For example, dimensionally strongly determined expressions like *mauve* are said to carry an internal thematic dimension; for *mauve*, an internal dimension of color. Some weakly determined adjectives like *good* can also have a default internal dimension. Say, when predicated of people, it carries the default internal dimension of moral qualities. Explicit lexical items like predicate-limiting adverbials indicate external dimensions, and contextual dimensions are dimensions determined contextually. General considerations of discourse coherence explain the order of priority of external, contextual, and internal dimensions. Take a look at the following examples:²⁾

1) Here, symbols \models and $\not\models$ represent semantic entailment relations. Obviously, “p \models q” means “p entails q” while “p $\not\models$ q” means “p does not entail q.”

2) (7a, b, c) are my own examples.

- (7) a. (Out of the blue) John is good.
 b. (Mary is looking for a good-looking and good-mannered escort for a party, where she wants to show off herself. Someone is recommending John as her escort.)
 John is good.
 c. When it comes to athleticism, John is good.

(7a), which involves a default internal dimension, is interpreted to mean that John is a good person morally. (7b), with a contextual dimension, means that John is a good escort candidate with good looks and manners. (7c), in which an external dimension is lexically indicated, asserts John's good athleticism, but it doesn't assert his goodness as a player with stamina, as a player with sense, or as a player in general.

When it comes to the issue of the correlation between metaphor and thematic dimensions, Leezenberg proposes that LI presupposes the default thematic dimension while MI presupposes a novel thematic dimension. In other words, back to (1),

- (1) Anchorage is a cold city

the LI of (1) is obtained in the default thematic dimension, "climate or temperature" dimension, while its MI is obtained in a novel dimension, "hospitality or attractiveness" dimension, depending on the context.

2.2. Semantic Clash

Leezenberg also argues that Generativists' account based on the notion of semantic clash or grammatical deviance is not correct. According to Chomsky (1965, p. 149), so-called semigrammatical sentences that violate selectional restrictions could receive a metaphorical or other nonliteral interpretation in an appropriate context. That is, Generativists argued that an MI can be obtained if a semantic clash or deviance is observed in the LI of an utterance, as illustrated in the following examples:

- (8) a. Sincerity may frighten the boy. (Chomsky 1965)
 b. John is a tiger.

Concerning the notion of semantic clash in the interpretation of metaphor,

Leezenberg argues that many metaphors are not at all grammatically deviant. He presents the following utterances as counterexamples, to support his argument:

(1) Anchorage is a cold city.

(9) The rock is becoming brittle with age.

He argues that no semantic clash is observed in the LI of either (1) or (9). Consequently, a semantic clash cannot be a necessary condition to derive the MI of an utterance. As for the MI of each of the above utterances, if a novel dimension, namely, “hospitality” dimension is applied in the context, (1) receives an MI. For (9), its LI involves the default internal dimension, namely, “biological” dimension. However, if a novel dimension is applied in an appropriate context, *the rock* could refer to an emeritus professor, and an MI is derived.

He further proposes that the sense of anomaly felt by the language users in the MI is related with the novelty of the thematic dimension involved in it:

(10) John is a wolf.

The default dimension of (10) is a “biological” dimension, in which what (10) means is that John is biologically a wolf. You could say in this reading that John is the name of a wolf. On the other hand, the MI of (10) involves a novel dimension, say, a non-biological “personality” dimension.³⁾ In this reading, John could be described as a person who is cruelly avaricious, a person who amorously hangs around women, and so forth. Thus, the sense of semantic deviance intuitively felt by the language users comes from the newness or unfamiliarity of the thematic dimension of the MI of an utterance.

Consider the following example:

(11) Halfway down the path *of life*. (Dante)

3) In fact, Leezenberg does not specify which novel dimension is involved in the MI of either (9) or (10). Obviously, depending on the context, more than one dimension could work as candidates for novel dimensions for (9) and (10) each.

According to Leezenberg, outside a thematic context, metaphors typically do not yet express any specific content. Therefore, what is indicated by (11) is merely that *the path* cannot be interpreted in its default thematic dimension. That is, this dimension is blocked if it is not compatible with features of the reference situation, specifically those introduced by the modifier *of life*. Thus, he further comments that the “blocking of default dimensions accounts for the sense of anomaly that metaphors, especially those involving dimensionally strongly determined expressions, tend to display when taken out of context” (Leezenberg, 2001, p. 225).

To summarize some important aspects of Leezenberg’s theory, first, the semantic interpretation process of metaphor is context-dependent. Second, (predicative) metaphors express class assertions, and do not *indirectly* convey a metaphorical content. For example, a metaphor *John is a wolf* expresses the assertion that John belongs to the extension of the predicate *wolf* within a specific thematic dimension of the context. Third, there is nothing “metaphorical” about the content of an utterance itself. It is just the propositional content determined by the metaphorical application of an expression in a novel thematic dimension. What is asserted is the content of the sentence as interpreted metaphorically, and what is presupposed is the thematic dimension that is implicitly given or linguistically expressed.

2.3. Ad Hoc Concepts and Theories

In this subsection, we should discuss two more important notions of Leezenberg’s theory, namely, “ad hoc concepts” and “theories.” After proposing a principle of MI based on the notions of context and thematic dimension, he states that a semantic account cannot explain why a specific metaphorically applied expression determines a specific property, especially for novel and cross-categorical metaphors. He further states that the “motivation” of the metaphorical application of a particular predicate, which is an important aspect of MI, cannot be treated within semantics.

Given this, Leezenberg seeks a solution for this at the level of concepts. And yet, it is argued that his complementary theory is different from conceptualists’ views in the sense that his theory is based on more practice-oriented view of concepts and categorization, rather than on systematic and scientific view.

For his quite epistemological approach, first, he defines some terminologies.

Several important notions are defined as follows (Leezenberg, 2001, p 252):

- (12) a. A concept is a meaning. A concept is an epistemological reconstruction of properties. A concept is that in virtue of which a word is applied to an object or category. A concept applies, rather than refers, to an object or a set of objects.
- b. A category is a set of objects at the level of extensions.
- c. A word expresses a concept, and it denotes a category.

He states that in a novel metaphor, in which the intersection of the so-called pre-property expressed by the metaphor and the thematic dimension is empty, the language user must “construct” a concept that corresponds to the attributed property.⁴⁾ In other words, in the case of a novel metaphor, the conceptualization for the property of the metaphor in the thematic dimension has not been made, so that a process of concept construction by the language user must be rendered. This process of a new concept formation for a novel metaphorical expression is proposed to be a so-called “ad hoc concept” formation process. He further proposes the notion of “theories,” based on which the “ad hoc concept” construction is made.

First, Leezenberg’s notion of “theories” is based on Murphy and Medin (1985). According to them, a “theory” is a collection of “mental explanations” rather than a fully coherent and systematic body of knowledge, i.e., a “complex set of relations between concepts, usually with a causal basis.” For example, in the case of whales, one might want to categorize them as fish on the basis of perceptual similarities (both have fins, live in water, etc.), but on the basis of causal, theoretical knowledge (mammals do not have gills, do not lay eggs, etc.), one might want to classify them as mammals. In this situation, which features are counted as critical for category membership is determined by “theories,” i.e., in a simplistic way, the language users’ practice-based experiential and cognitive knowledge. Murphy and Medin also include those theories that are not as fully explicated and general as (quasi-) scientific ones, such as commonsense beliefs and stereotypes, tacit background assumptions, and mental structures of

4) Since the property of the metaphor is determined or selected in the context by the thematic dimension, the property of the metaphor before the contextual information is processed is called its “pre-property.”

expectations about the world. Leezenberg also emphasizes “goal-based theories,” in the sense that theories are always formed for specific “goals,” and thus may explain and justify specific categorizations. For instance, barber poles and zebras are striped, but people tend to categorize zebras together with (non-striped) horses rather than with barber poles, based on a motivation, say, things that are edible, or may be useful for agricultural work. In most cases, there won’t be any motivation for categorizing barber poles and zebras together. Consequently, categorization is determined by people’s specific goals and interests, not just by attribute matching. Theories and their goals determine which features count as crucial in categorization.

Second, when it comes to the notion of “ad hoc concepts” formation, Barsalou (1983) experimentally demonstrated that there are cases in which people form groupings of objects that are usually not thought of as belonging together, and that may clash with existing categorizations or violate correlational structure. And yet, if there is a need, such a concept may be formed in specific circumstances. Barsalou called this kind of theory-based and goal-determined concept as “ad hoc categories.” As discussed by Barsalou (1983) and Murphy and Medin (1985), for example, children, dogs, stereo sets, and blankets do not form a natural concept, but they are taken to form an ad hoc concept “things to take out of one’s home in case of fire,” and this grouping makes sense and becomes coherent.

Have a look at the following metaphor example (13):

(13) Some lawyers are sharks.

(14) a. I wonder why Joan took that impossible case to defend.

b. J’s defenders have helped him with his lawsuit, but they left him bankrupt.

According to Leezenberg, a simple metaphor in (13) can lead to the formation of different ad hoc concepts in different contexts, for example, depending on whether (13) is preceded by (14a) or (14b). The ad hoc concept *shark* in (13) formed by the context (14a) is something like “individuals that grab hold of anything they can,” while that by (14b) is “individuals that ravage their victims.” Thus, the notion of “perspective” under which the ad hoc concept is formed is important in his conceptual

account. This notion serves as a goal for, and a constraint on, the interpretation.

He further notes that in everyday situations, words can be applied to various different objects under various different perspectives, and this flexibility in the use of words has to be reflected systematically in the flexibility of concepts. The dependence on contextual factors also plays down the importance of abstract and decontextualized “conceptual domains,” which play a central role in earlier conceptualist approaches.

To summarize, Leezenberg argues that his semantic account and conceptual account are complementary and they describe the same interpretive process in semantic and epistemological terms, respectively. And yet, the conceptual account goes beyond the semantic account, in the sense that it tries to explain the basis of metaphorical categorizations.

Focusing on the main aspects of Leezenberg’s theory presented in this section, we will try to point out some problems of his theory in the following section.

3. Problems of Leezenberg’s Theory

3.1. Is “Thematic Dimension” Useful?

As discussed above, Leezenberg argues that both LI and MI are obtained in the same way, except for the selection of the thematic dimension in the context. According to him, the former is obtained in the default dimension, but the latter is in a novel dimension. The following utterances are two of the very few metaphor examples he uses to illustrate his arguments:

(1) Anchorage is a cold city.

(10) John is a wolf.

In (1), as discussed above, “temperature” dimension is the default dimension, and “hospitality” dimension is a novel dimension. As for (10), “biological” dimension is the default dimension, but he is not specific about its novel dimension. Then, compare these examples with the following examples:

(15) Mary is cold.

(16) I am cold.

(17) It is a wolf.

For (15-16), what is the default internal dimension? Is it still “temperature” dimension? Is “hospitality” dimension also a novel dimension here? If (15-16) are uttered out of the blue, the prominent reading of (15) seems to be such that Mary is a cold-natured person, in “hospitality” dimension, while that of (16) is such that the speaker feels cold, in “temperature” dimension. Again, the question is which is the default and which is a novel dimension here? As for (17), the default dimension would be “biological” dimension, and the utterance means that it biologically belongs to the wolf family. Furthermore, (17) normally cannot receive an MI in a novel dimension.

Then, what is the criterion that distinguishes the default and a novel dimension? For *cold*, it seems difficult to pick the default dimension between “temperature” and “hospitality” dimension. Furthermore, different intuitions concerning the so-called MI of (1) and (15-16) seem to be due to the fact that in (1), *cold* is applied to a nonhuman while in (15-16), it is applied to a human. In other words, the “hospitality” property of *cold* is a human property while its “temperature” property doesn’t make such a distinction. Also, for (10) and (17), in (10), where *wolf* predicates a human *John*,⁵⁾ an LI is impossible, and an MI is obtained in a so-called novel dimension, but in (17), in which *it* predicates an animal, an LI is obtained in the “biological” default dimension.

All in all, it seems that for *cold*, it is difficult to decide on the default dimension between “temperature” and “hospitality” dimension when it predicates a human entity, while only “temperature” dimension works as the default dimension when it predicates a nonhuman entity. These differences related with the property of human or nonhuman also apply to *wolf*.

5) Here, it is also possible that *John* is the name of a wolf, not of a human. And yet, here we are just assuming that *John* is a human. To clarify this ambiguity, we could replace *John* with the expression *the man*. Similarly, in (17), we are also assuming that *it* is an animal, although *it* could denote an inanimate entity.

In this situation, it could persuasively be argued that for *cold*, both “temperature” and “hospitality” property have been conventionalized and lexicalized, with the selectional restriction for the latter property being that it applies only to human entities. Then, the distinction between the default and a novel dimension all seems to come down to the notion of semantic clash in examples like (1), (10), and (15-17), and the notion of thematic dimensions becomes useless.

Furthermore, default and novel thematic dimensions are very nebulous notions. A novel dimension can, after all, be argued to be a dimension which is not generally utilized in connection with an expression, which means that some kind of semantic or conceptual inconsistency is involved related with the dimension. If an expression is interpreted in a thematic dimension without any kind of semantic or conceptual inconsistency, what could be so novel about that dimension? Then, the notion of thematic dimension could be and should be replaced with the notion of semantic inconsistency.

3.2. Is “Semantic Clash” Useless?

Consider again the example presented by Leezenberg as a counterexample to the Generativists’ account:

(9) The rock is becoming brittle with age.

As discussed above, the LI of examples like (9) does not reveal any semantic clash. Hence, the Generativists’ claim that an MI is obtained due to the semantic clash observed in the LI, does not hold. However, when it comes to the MI of (9), in which the concept of *rock* applies to an emeritus professor in the context, a semantic inconsistency is involved. That is, the concept of *rock*, which applies to an inanimate entity in our semantic interpretation model, is being mapped to the concept of *emeritus professor*, which applies to an animate human. We could intuitively recognize a clash in our semantic model, and we need a help from our cognitive model, based on which the concept of *rock* could be mapped to a set which contains the emeritus professor as a sole entity in the given context. In other words, although an MI is not derived from the semantic clash in the LI of an utterance, semantic inconsistency is observed in its metaphorical interpretation process.

Consider another metaphor example:

(18) Napoleon is getting impatient.

In (18), the LI does not involve any semantic clash or inconsistency. And yet, the MI, in which *Napoleon* applies to a tyrannical person, does involve a semantic inconsistency, in the sense that the referred person is not Napoleon himself, who used to be the emperor of France.

What seems to be happening here is that, despite the existence of semantic clash, the language users' effort to get meaningful information from an utterance makes it possible to utilize their linguistic device, i.e., MI, with a help from their cognitive conceptualization resources.

3.3. Literal vs. Metaphorical Interpretation

As discussed above, Leezenberg does not distinguish metaphorical language from literal language. He argues that the concept of literal meaning is a regulatory ideal for education and lexicography, and that it is something that does not really exist.

Let us consider the following examples:

(19) She is a princess.

(20) John is a sheep, but Peter is a tiger.

(21) He put a knife into my heart. I'm deeply wounded.

(22) He threw a stone to me.

(11) Halfway down the path of life. (Dante)

(23) He threw away my love.

(24) The big wave completely broke away my life.

(25) Love doesn't wait for you.

First, for (19-22), depending on the context, they could either receive an LI

or MI, but for (11) and (23-25), they could receive only an MI. As discussed above, Leezenberg would set up a novel thematic dimension for each MI of the above examples. However, it seems to be a difference in the interpretation process, not in the selection of the thematic dimension, that distinguishes an MI from an LI.

That is, although contextual factors play an important role in determining the meaning of an utterance including its literal and metaphorical meaning, the linguistic form of an utterance says a lot more about its meaning. In (19), that the concept of *princess* is predicated of *she* does not cause any semantic clash, if it is not presupposed that *she* is not a daughter or a granddaughter of a king or queen. Also in (20), no semantic clash is caused, if *John* and *Peter* are biologically animals. For (21), if the concept of *heart* applies to an anatomical organ of blood circulation, then no semantic clash is derived. Also for (22), if the concept of *throwing a stone* applies to that of physically casting a piece of mineral rock, then there exists no semantic deviance. In each of all these cases, an LI is obtained. On the other hand, the concepts of *princess*, *sheep*, *tiger*, *putting a knife into a heart (mind)*, *wounded*, and *throwing a stone* could all receive an MI, in which a semantic clash is recognized.⁶⁾

When it comes to examples (11) and (23-25), the linguistic context is not the same. Here, each pair of concepts apparently cause a semantic clash. In (11), a concrete physical concept *path* and an abstract concept *life*; in (23), a physical action *throwing away* and an abstract emotion *love*; in (24), a physical activity *wave's breaking away* and an abstract concept *life*; and in (25), an abstract and formless emotion *love* and a physical action *waiting*.

Consequently, the way the examples receive an MI seems to be not so much related with the notions of context and thematic dimension, as with the notions of semantic clash and conceptualization. Besides, although it is true that whether an utterance receives an MI or an LI is determined in the context, it seems also true that the language users intuitively do distinguish an MI from an LI, as supported by the contrast in the availability of MI and LI between examples (19-22) and examples (11, 23-25).

6) According to the Cobuild Metaphor Dictionary (Deignan 1995), the MI of *sheep* refers to a group of people who do not have their own opinions but just copy what other people say or do and believe what other people tell them to believe. As for the MI of *tiger*, it refers to a set of those people who are brave, aggressive, and determined to make the best of any situation.

Furthermore, it does not seem true that the LI, MI, speech act interpretation, and ironical interpretation of an utterance all have the same status except for the fact that each of them is interpreted in a different thematic dimension. Let us consider the following example:

(26) It's getting hot in here.

Depending on the context, (26) could receive at least five different readings. These are an LI, an MI, a speech act interpretation, an ironical interpretation, and a metaphorical ironical interpretation. The first LI is such that the temperature of the place is rising. The second MI is such that, say, the speaker is talking about the intensity of an argument going on at the place. The third speech act reading could be such that the speaker is requesting the hearer to open the window by uttering (26). The fourth ironic reading is such that the speaker is sarcastically describing the situation in which s/he feels cold, although, say, s/he was informed that the heating system began to work quite a while ago, so that the temperature of the place would rise by now. The fifth ironic and metaphorical reading is such that the speaker is again sarcastically describing the tepidness of an argument going on at the place, say, contrary to his or her expectation that it would be intense.

Given these readings, Leezenberg should argue that all these readings have the same status, and that the interpretation of (26) is determined in the context, depending on which thematic dimension is selected. Then, what is the default and what is a novel dimension here?

3.4. Conventionalized vs. Novel Metaphor

Leezenberg observes that conventional metaphor and novel metaphor cannot be divided into two distinct groups, and that these notions are related to the scale of conventionality.

Metaphors are continuously created. If a new metaphor is applied not just once, but repeatedly applied in one instance after another, it will gradually be conventionalized, and it could reach the level of lexicalization at the end. In this sense, the conventionality of a metaphor is a scalar notion.

When discussing his theory based on the notion of thematic dimension, Leezenberg does not distinguish conventional metaphors from novel meta-

phors. Only when he discusses the notion of “ad hoc concept formation,” he proposes that for novel metaphors, the conceptualization for the property of the metaphors in the thematic dimension has not been made, so that a process of concept construction by the language user must be made, which is an “ad hoc concept formation” process.

What could be inferred from this is that Leezenberg accounts for conventionalized or dead metaphors with thematic dimensions, while dealing with novel metaphors with ad hoc concept formation. This two-way account obviously has problems. One is that as he observes himself, the conventionality of metaphors is a scalar notion, so that you cannot divide metaphors into one group of conventionalized metaphors and the other group of novel metaphors, and provide two different interpretation principles for two groups of metaphors. A persuasive theory of metaphor should be able to account for the scalar property of the conventionality of metaphors.

Another problem is that he tries to explain conventionalized metaphors with the notion of novel as well as default thematic dimension. If we look at Lakoff's metaphorical examples based on conceptual metaphors, including Leezenberg's few examples of metaphor, most of them are observed to be conventionalized and lexicalized metaphors.⁷⁾ The following are some of the examples and their lexicalized metaphorical meanings listed in the *Random House Dictionary of the English Language*, 2nd Edition:

- (27) a. *cold*: not affectionate, cordial, or friendly; unresponsive
- b. *wolf*: a cruelly rapacious person;
a man who makes amorous advances to many women
- c. *shark*: a person who preys greedily on others, as by cheating or usury; a person who has unusual ability in a particular field
- d. *sun*: something likened to the sun in brightness, splendor, etc.
- e. *healthy*: prosperous or sound
- f. *burn*: to feel extreme anger; to feel strong emotion or passion
- g. *prune*: to remove (anything considered superfluous or undesirable)

7) The concept *shark*, which is used as an example of novel metaphor by Leezenberg, as discussed in section 2.3. above, is also included in the list of lexicalized examples (27).

That the metaphorical meanings of these expressions are lexicalized indicates that the distinction between the default and novel dimension is quite arbitrary. For example, the “hospitality” property of *cold* in (27a) is so well-trenched that the first reading you get from (28a) is such that she is unfriendly and unhospitable. This reading could intuitively be perceived as an LI. Even if it is perceived as an MI, the “hospitality” thematic dimension is unlikely to be perceived as being novel or unfamiliar. As discussed above, however, the primary reading of (28b) is obtained in the “temperature” dimension.

- (28) a. She is cold.
- b. Anchorage is a cold city.

Then, where does the notion of novel dimension come from? How is the novelty of a dimension determined? The answers for these questions are not clear at all, and Leezenberg’s account on conventionalized metaphors in terms of the thematic dimension should be questioned.

To summarize this section, some problems of Leezenberg’s analysis have been discussed. The notion of thematic dimension, on which his theory is crucially based, has been argued to be inappropriate, and his two-way analysis has also been argued to be problematic. Given this, we will present an alternative account of metaphor in the following section, which hopefully could solve the problems posed by Leezenberg’s theory.

4. An Alternative Analysis

4.1. Kinds of Metaphor

As pointed out above, novel metaphors are continuously created. Besides, some of them are repeatedly applied and become conventionalized enough to be part of the lexicon. Thus, depending on the degree of conventionality, metaphors could be lined up on a scale. At one end of the scale, fully conventionalized metaphors as in (29) form a group whose meanings have entered the lexicon, while at the other end of the scale, novel metaphors as in (30) and (31) form another group whose meanings require an extra process of interpretation on the part of the language users.

- (29) a. She is *a princess*.
 b. Don't be *a sheep*. Be *a tiger*.
 c. A good therapist will try to find the *root* of the problem. (Cobuild English Guides 7: Metaphor)
 d. The *mouth* of the river
 e. The *foot* of the mountain
- (30) a. Love is (*riding*) *a taxi*. (A bus comes if you wait, but a taxi should be caught. If it rains or snows, you have to wait longer. When you get off, you have to pay the price. If you have come a long way, you have to pay more when you get off. Furthermore, a shared ride is illegal.)
 b. Life is *a marathon*. (Everyone is equal on the start line. You have the finishing line to reach. After you start, there could be people ahead of you and/or behind you. . . .)
- (31) a. My gag is *water*. (It's not nutritious.)
 b. My gag is *side dishes*. (If it's all the same, it's cloying.)
 c. My gag is *the first snow of the season*. (It quickly passes by.)
 d. My gag is *a listening test*. (If you miss the first part, it's all over.)
 e. My gag is *the early-riser amateur soccer*. (Although nobody is watching, I do my best.)⁸⁾

The metaphorical meanings of the italicized expressions in (29) are listed in the lexicon, but those of the expressions in (30) and (31) cannot easily be derived without a help from the utterer. And yet, if you are provided with the information in the parentheses as in (30) and (31), you could easily nod at the reasoning or conceptualization behind them.

Another observation is that among the examples in (30) and (31), the metaphorical reading of (30b) seems to be rather easily derived, comparing to the other examples. It indicates that for example, the relationship between the concept of *love* and that of *taxi* in (30a) is "cognitively less accessible" than the relationship between *life* and *marathon*.⁹⁾ A mapping

8) Examples (31a-e) are from the Internet. These are the lines of a gagman who appeared on the KBS Gag Concert program.

9) The notion of "cognitive accessibility," used here is quite closely related to Sweetser and

between two heterogeneous concepts causes a semantic clash, and as an effort to get a meaning from this mapping as cooperative and effective language users, we attempt to utilize a mechanism of metaphor by conceptualization. Then, this conceptualization could easily be rendered if two heterogeneous concepts are cognitively more accessible, like the pair *life* and *marathon*. These two concepts seem more accessible to each other than the concepts *love* and *taxi*, since through our experiences, world knowledge, and cognitive abilities, we could find compatible or correlative aspects more easily between the former pair of concepts than the latter.

Let us compare examples in (30) and (31) with the following examples from Kövecses (2002):

- (32) Two roads diverged in a wood, and I--
 I took the one less traveled by,
 And that has made all the difference.
 (From a poem by R. Frost)

- (33) Does the road wind up-hill all the way?
 Yes, to the very end.
 Will the day's journey take the whole long day?
 From morn to night, my friend.

But is there for the night a resting place?
 A roof for when the slow, dark hours begin.
 May not the darkness hide it from my face?
 You cannot miss that inn.
 (From a poem by C. G. Rossetti)

The passages in (32-33) are generally analyzed to be interpreted metaphorically. The two poets are conceptualizing the concept of "life" in terms of that of "journey," according to Kövecses. In (32), the *two roads*

Fauconnier's notion of "access." The following is their "principle of access" (1996, p. 7):

... An expression which names or describes one entity (the trigger) can be used to access (and hence refer to) an entity (the target) in another domain only if the second domain is cognitively accessible from the first, and if there is a connection between trigger and target.

This notion will be discussed more in detail below.

indicate the two alternatives the poet had in his life. Similarly, in (33), "living a life" is compared to "traveling along the winding road."

One thing we can observe in these poems is that their metaphorical reading could often be unnoticed by the readers unless the critics' interpretations are provided. This could be explained by the fact that which concept is related to which concept is not revealed linguistically as well as contextually. In other words, the two passages are well read literally and without any context.

As will be shown below, examples like (32-33) could be used as counter-examples to Lakoff's system of conceptual mappings as a theory of metaphorical interpretation, since this kind of conceptualizations at an abstract level do not seem to be utilized when we interpret metaphors. What we need is a process of conceptualization at a more specific level, i.e., direct conceptualizations between linguistic expressions and their new concepts.

In sum, we have roughly classified metaphors into three groups, in terms of the degree of conventionality. One group includes fully-conventionalized metaphors, as examples (29b-e), which do not require an additional conceptualization process.¹⁰⁾ Another group contains unconventionalized but interpretable metaphors, as, probably, examples like (30b), which could be interpreted through a conceptualization process based on the language users' world knowledge, experiences, cultural stereotypes, etc. The last group consists of unconventionalized novel metaphors, which are not easily interpreted, as examples like (30a) and (31a-e). These metaphors require not only an additional conceptualization process, but also extra information related with the conceptualization, as illustrated by the additional information in the parentheses in (30a) and (31a-e).

Although we have roughly classified metaphors into three groups, it is obvious that no clear-cut distinction between groups can be made and there exist fuzzy or intermediate areas between groups. Furthermore, depending on individual language users, groups of people, and individual metaphors, there could be variations in conventionality and cognitive accessibility with the same metaphor expression. Given this, the important thing is that a theory of metaphor should be able to account for this

10) As for (29a), you might also include *princess* in the fully-conventionalized metaphor group, since its metaphorical meaning could be found in the dictionary. And yet, as discussed below, since it could receive different MIs depending on the context, although the basic meaning of all these MIs is similar to each other, we leave it out from the fully-conventionalized metaphor group.

scalar property of metaphors. Leezenberg's theory, however, comes down to bifurcating metaphors into two ambiguous groups, one of which is accounted for by his semantic approach based on thematic dimension and the other by his cognitive approach based on ad hoc concept formation.

4.2. Accessibility Checking and Conceptualization

First, let us consider the following example:

(34) She is not a mother.

For (34), suppose a situation in which the speaker is talking about a woman who left home abandoning her children to find a better life. In this situation, the extensional meaning of (34) is false with respect to the possible world model of a model-theoretic semantics, since the woman is a mother. Given this, as in the case of presuppositional accommodation, the hearer tends to try to find a way to interpret the speaker's utterance as relevant and true. As a result, in (34), the hearer rejects the false LI as a possible reading, and finds another suitable interpretation. This alternative interpretation is such that the woman under discussion does not reach the speaker's or general public's certain expectations of a mother. Here, these expectations include a property of a mother such that she should be a person who could sacrifice her life for her children and stand by them, especially in times of trouble. This reading cannot be an intensional interpretation. The speaker and hearer already know that the woman is a mother, so that they cannot "believe" that she is not a mother.

Then, what is this interpretation? I'd like to propose that this is an MI. If we compare this example with (19), both (34) and (19) require a process of cognitive conceptualization.¹¹⁾

(19) She is a princess.

In both (34) and (19), it could be said that the concepts of *mother* and *princess* are being newly conceptualized in the given contexts. For example, for (34), properties of the speaker's expectations of a mother may vary

11) For (19), its LI is being ignored. Or it is assumed that she is not a woman having sovereign power.

depending on the context. They could include a property of a *mother* as a primary caretaker, as a strong emotional supporter, as a good role-model and educator, or as a traditional homemaker. As for (19), as pointed out above, it could be argued that its MI has been lexicalized. However, as in the case of (34), the source of her being called a princess could vary depending on the context. It could be her graciousness, her pretentiousness, or something else.

Especially for (34), its process of conceptualization seems to be a quite productive one, as the following examples show:

- (35) a. She is not a woman.
- b. She is not a teacher.
- c. He is not a clergyman.
- d. He is not a politician.

In what way, s/he is deviant from the speaker's expectations of a *woman*, *teacher*, *clergyman*, or *politician* could be determined by the conceptualization performed in each context. For (35a), the way she dresses, the way she behaves, the way she talks, or the way she deals with things (or all of these) could be different from the speaker's or the general people's expectations of a woman.

In this way, an MI involves a process of conceptualization, which is similar to Leezenberg's ad hoc concept formation process. In other words, for example, in (34), we could conceptualize the concept of *mother* as a set of mothers who could sacrifice their lives for their children and stand by them in times of trouble, and what is asserted by (34) is that *she* does not belong to this set.

Consider some more metaphor examples:

- (36) a. His career is roller-coastering.
- b. His career is skating.
- c. His career is roller-blading.

In (36a, b, c), in a general picture, *his career* is being conceptualized as "going on the road riding on a vehicle," i.e., as "something that is making a progress toward a goal." In a specific picture, as for (36a), the suddenly extremely changeable characteristic of *roller-coastering* is salient enough to guarantee the conceptualization of *his career* as "riding on a roller-

coaster." Or it might also be argued that this conceptualized meaning of *roller-coastering* has been well-conventionalized to be listed in the lexicon. On the other hand, for (36b, c), the characteristics of *skating* and *roller-blading* don't seem to be distinguished enough to be able to be mapped onto the concept of *his career*.

What is proposed to happen in this situation is that given the semantic incompatibility of two concepts in utterances like (36a, b, c), we first check the accessibility between the two concepts on a cognitive level, not on a semantic level. Based on our world knowledge, experiences, social practices, and other resources, we decide on the possibility of conceptualization between the two concepts. As for (36a), a cognitive accessibility could rather easily be captured and a conceptualization is performed. Concerning (36b) and (36c), however, the degree of accessibility seems to be too low to be perceived. Thus, the hearer might leave it to the speaker's explanation or reject its MI.

There exist different degrees of accessibility, depending on the appropriateness as well as the conventionality of metaphorical expressions. Although the speaker provides a basis of the metaphorical conceptualization, the hearer might reject it as an unsuccessful case. For the following examples, more than one accessibility could be found, and we should decide which is appropriate in the context:

- (37) a. She is the sun.
- b. She is Cleopatra.

As for (37a), the concept, *the sun*, could be accessible in more than one way. Among these possibilities, one should be selected in the context, and *the sun* could be conceptualized in one of these ways: (i) exemplary and peerless, worthy of worship; (ii) with extreme anger or brute force; (iii) with uninterrupted continuity of righteousness; (iv) with the cyclicity and eternal recurrence of greatness.¹² If, say, it is conceptualized as (i), *she* should belong to a set of people who are exemplary and peerless, worthy of worship, for (37a) to be asserted as a true statement. Similarly, for (37b), *Cleopatra* is also accessible in more than one way, so that it could be conceptualized as a woman who is very seductive, who has an exuded

12) Stern (2001) provides (37a) as a metaphorical utterance with more than one MI.

charisma, who is a shrewd politician, or as all of these.

As for (38a, b), neither an accessibility between the concept of *blazing* (fire) and that of intensity of *indifference* nor an accessibility between *her beauty* and something *built-up* (building) can be captured for a process of conceptualization to be made:

- (38) a. His indifference toward her was blazing.
 b. She's been trying to build up her beauty.

That is, based on our various knowledge and experiences, the concept of a weak emotion such as *indifference* is not accessible from the concept of *blazing*. Similarly, the concept of *beauty* doesn't seem to be accessible from the concept of *building*, although it might become possible in the future down the road.

To summarize, an accessibility between two concepts can be perceived in degrees. If it is low, no conceptualization is likely to be made. Besides, more than one perceivable accessibility between a pair of concepts could be obtained, but only one of them leads to a conceptualization in the given context. This process of accessibility checking and the process of conceptualization based on the result of this accessibility checking are proposed to account for the scalar property of metaphors discussed above.

Then, the process of MI is proposed as follows. First, MI presupposes semantic clash. It is not that the semantic clash involved in the LI of an utterance licenses its MI, as argued by the Generativists, but simply that an MI presupposes a semantic clash. That is, it is not just another interpretation of an utterance with its only difference having a different thematic dimension from that of its LI, but it involves a semantic clash and additional cognitive processes of accessibility checking and conceptualization.¹³⁾ Given a semantic deviance, what we try to do is to find a

13) Then, what about ironic interpretation, which often also involves a semantic clash? Consider the following ironic utterances:

- (i) It's getting hot in here.
- (ii) It's a wonderful weather.
- (iii) Christmas and New-Year tribulations. (Martin 1992)

If we are reminded of the fourth ironic reading and the fifth metaphorical ironic reading of (i) discussed in section 3.3, it is obvious that a semantic clash is present in both of the readings. As for (ii), if it is uttered in a situation where the speaker is commenting on a horrible weather referring to the weather forecaster's opposite prediction, a semantic clash is also involved in this ironic utterance. And yet, (iii), which is a revised version of the

perceivable cognitive accessibility between two semantically incompatible concepts, based on which a conceptualization is made.

These accessibility checking and conceptualization processes are proposed to involve a cognitive model, M_c , which is composed of a set of cognitively accessible worlds, W_c , in addition to a semantic model, M , which includes a set of possible worlds, W .¹⁴⁾ The cognitive model is for the interpretation of metaphors and possibly other expressions, which cannot be interpreted with respect to the possible set of worlds close to the actual world. This cognitive model includes A , which is a cognitive accessibility checking function, and C , which is a conceptualization function. It is also proposed that this cognitive model is composed of all the cognitive knowledge and/or state of affairs such as the social, cultural, emotional, and other connotations associated with each word in the lexicon, the categorization networks of concepts in a similar sense of Lakoff (1987), the concepts of boundaries and extended entities created by our cognition (Smith, 1999), and other various knowledge dependent on our cognition.

Therefore, in our proposed theoretic framework based on model-theoretic semantics by Richard Montague, we need two models, one is a set of possible worlds model and the other is a set of cognitively accessible worlds model. If an expression manifests a semantic clash between two concepts in the sense discussed above, it will be interpreted with respect to the cognitive model, which will work as a supplementary model for the objective possible world model.

typical expression "Christmas and New-Year celebrations," does not involve any semantic deviance.

Therefore, we can observe that an ironic interpretation does not always involve a semantic deviance, unlike an MI. It's rather that an ironic interpretation always involves a pragmatic deviance from the hearer's world knowledge, common sense, and experience, or what is generally believed or quoted. The recognition of this deviance also involves a metarepresentational cognitive process, but not a conceptualization process between two concepts as in MI. It might be argued that what an ironic utterance tries to argue or indicate is the deviance or clash itself between an actual state of affairs and the hearer's or/and the general public's world knowledge, experience, beliefs, common sense, previously-mentioned information, etc. For more detailed discussion on the deviance involved in ironic interpretation, refer to Yoon (2001).

- 14) The notion of "possible worlds" is related with the objective possible states of affairs, the best of which is the actual state of affairs. On the other hand, the notion of "cognitively accessible worlds" is related with the mental states of affairs, which are composed of the so-called "theories." These theories work as the source of knowledge and experience for metaphorical conceptualizations. It is further proposed that this cognitive model works as a complementary model for the objective possible world model.

One interesting characteristic of this model is that newly conceptualized concepts are continuously created in the given utterance contexts, and the sets of objects to which these concepts apply are also continuously created in the given utterance contexts. Furthermore, if one newly conceptualized concept repeatedly applies to a set of objects one instance after another, then the concept is gradually conventionalized and moves into the set of possible world model, *M*, little by little.

To illustrate the process of MI, a fragmentary model with two metaphor examples is presented in the following:¹⁵⁾

(39) She is not a mother.

(40) He threw a stone to my placid mind.

(41) A fragmentary model:

$M = \langle U, W, F \rangle$

$U = \{a, b, c, d, e, f, g, \dots, \}$

$[\text{mother}] = \{a, c, e, g\}$

$[\text{mind}] = \{u, v, w, x\}$

$[\text{peaceful}] = \{i, j, u, w\}$

$[\text{peaceful mind}] = \{u, w\}$

$[\text{stone}] = \{o, p\}$

$[\text{throw}] = \{ \langle m, o, c \rangle,$

$\langle n, p, g \rangle, \langle b, q, y \rangle$

$[\text{throw a stone to someone}] \dots \dots$

$= \{m, n\}$

$M_c = \langle U, W_c, A_{(0 \leq n \leq 1)}, C, F \rangle$

$A(\text{mother}, \text{mother}_1) = n$

$A(\text{mother}, \text{mother}_2) = n$

$C(\text{mother}, \text{mother}_1) = \{a, c, e\}$

$C(\text{mother}, \text{mother}_2) = \{a, g\}$

$A(\text{mind}, \text{container with fluid}) = n$

$C(\text{mind}, \text{container with fluid})$

$= F(\text{mind}) = \{u, v, w, x\}$

$A(\text{placid mind}, \text{peaceful mind}) = n$

$C(\text{placid mind}, \text{peaceful mind})$

$= F(\text{peaceful mind}) = \{u, w\}$

$A(\text{throw a stone}, \text{agitate}) = n$

$C(\text{throw a stone}, \text{agitate})$

$= F(\text{agitate}) = \{ \dots \}$

15) In the model (41), for simplicity, the components of a set of possible worlds (*W*) and that of cognitively accessible worlds (*W_c*) are being ignored. Thus, the temporary property of the cognitive accessibility function values and the conceptualization function values is not well represented. And yet, as discussed earlier, it is assumed that the cognitive accessibility checking and conceptualization processes are rendered given each metaphorical utterance in the given context.

In (41), the cognitive accessibility function *A* is represented as numbers between 0 and 1, where 0 means no accessibility and 1 means a full accessibility. If it is 0, no conceptualization can be made. And yet, there could be cases in which the hearer cannot decide on the degree of accessibility, but with a help from the speaker, a conceptualization can be made. The so-called “theories” in the sense of Leezenberg (2001) form the contextual functions, *A* and *C*. Also, “mother₁” and “mother₂” indicate the possibility of more than one instance of accessibility and conceptualization of *mother*, depending on the context.¹⁶⁾

As in (41), the two concepts, between which a cognitive accessibility is checked, and one of which is conceptualized in terms of the other based on the result of the accessibility checking, do not match with the so-called target and source concept domains of Lakoff’s. Here, one concept, which is linguistically expressed as an entity or predicate, is proposed to be conceptualized into another concept, which is semantically heterogeneous to the former concept. Thus, the mapping between two concepts here is a process of searching for the metaphorical concept for a linguistic expression, which could sometimes be accounted for as part of Lakoff’s conceptual metaphor system.

5. Conclusion

Then, what can we conclude from all these discussions on metaphor? Why do we use metaphors? The answers for these questions might be quite expected ones. In some cases, we need metaphors. We cannot talk about the workings of abstract concepts without metaphors. We need to

16) As also pointed out by the reviewers, it should be admitted that the notion of “accessibility checking” heavily relying on the notions of “context” and “cognitively accessible world model” could be considered quite vague. For example, the notion of “theories,” which make up the cognitive model, is something that could be quite temporary and changeable, although the information that makes up the possible world model is also constantly updated. Besides, newly conceptualized concepts keep popping up and then disappear instantly. Only some of them keep showing up, being gradually conventionalized, and become part of the possible world model. In this sense, metaphorical conceptualization is a scalar notion. That is, all metaphorical expressions and conceptualizations are located on the scale of conventionality. Since metaphorical conceptualization and conventionalization processes rely on the mental states of affairs instead of the objective states of affairs, it doesn’t seem to be easy to clearly exhibit their workings and mechanisms.

concrete these concepts to make them approachable, or we simply need the help of metaphors to talk about them. In this way, some metaphors are indispensable.

Also, we tend to generalize, categorize, and conceptualize things. We talk about things, states, activities, and events. We do not just describe them, but we examine, analyze, anatomize, evaluate, define, and make judgements on them. These are what we civilized humanbeings do in our daily lives. At the level of describing as well as at the other levels, we often use metaphors, or rather we are forced to utilize metaphors. We often don't want to describe things in the same way as before or as others. We tend to find new ways of describing, analyzing, evaluating, defining, and making judgments on things, by relating one concept to another concept in unique ways. In other words, metaphor is a way of thinking, and a natural process of human cognition. As we have seen above with examples (31a-e) in section 4.1, metaphors could also be used to derive humor by combining two semantically remote but cognitively accessible concepts. Furthermore, metaphors also cause meaning shift, as studied by linguists working on grammaticalization.

All in all, metaphors are prevalent in our way of life, and a prevalent way of thinking. As pointed out by Sperber and Wilson (1986), metaphors approximate the speaker's thoughts rather than describing them precisely. The propositional form of a metaphorical utterance resembles the speaker's thought. Jaszczolt (2002) also points out that if no objective meaning could be derived from the relation between propositions and states of affairs, we have access only to mental representations. Then, truth conditions would have to be relativized to mental representations rather than to the world. And yet, as pointed out by Kamp and Reyle (1993, pp. 10-11), accounting for natural language solely by referring to mental representations would only shift the problem of meaning to another language. Furthermore, what we speak or think about are things in the actual world, and for thoughts and utterances that concern the actual world there arises the question whether they are true or false. Also, in the context of practical reasoning, the truth conditions of the factual beliefs seem to be necessary. Given this, it could be argued that all these facts indicate that "the world-directed, truth value-determining aspect of meaning" is central in explaining thoughts and utterances. Again, however, object reality alone cannot explain metaphoric utterances, which obviously should involve mental representations.

Hence, as proposed above, this important phenomenon of semantics and pragmatics could be accounted for by an interpretation model which combines a truth-conditional semantics model and a cognitive model.

To summarize, one of the two main purposes of this paper was to discuss Leezenberg's (2001) interesting theory of metaphor, which is basically semantic but also attempts to combine cognitive aspects of language. The other main purpose was to propose an alternative analysis on the principles of metaphorical interpretation, which was basically an attempt to complement the problems of Leezenberg's theory.

In a situation where the two main theories of metaphor have never reached even a near consensus, what we can do is to point out the problems of each of the two theoretical disciplines, the cognitive semantics and the formal semantics, and to try to extract the virtues of the two. Consequently, our proposed theory, which is a combining approach of the two theories, seems to be part of the itinerary of our journey to reach the goal of coming up with a complete theory of metaphor.

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